IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No.   : 10/682,088   Confirmation No.   9198
Applicant   : Hamid Mahmood, et al
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Examiner   : Abelson, Ronald B.

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Commissioner for Patents
Alexandria, VA 22313-1450
U.S.A.
Dear Sir:

APPELANT'S BRIEF UNDER 37 C.F.R. 41.37

The following is the Appellant's Brief, submitted under the provisions of 37 C.F.R. 41.37. A Notice of Appeal for the above-identified application was filed on March 7, 2011. The fee of $540 that is required by 37 C.F.R. 41.20(b)(1) for filing the Notice of Appeal was originally submitted on November 25, 2009. With regard to the fee of $540 that is required by 37 C.F.R. 41.20(b)(2) for filing a brief in support of the appeal, the fee is being submitted simultaneously with this Appeal Brief.

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Real Party in Interest

The real party in interest is the assignee of record, i.e. Nortel Networks Limited, current address 5945 Airport Road, Suite 360, Mississauga, Ontario, Canada, L4V 1R9.

Related Appeals and Interferences

There are no related appeals or interferences that will directly affect, be directly affected by, or have a bearing on the present appeal.

Status of Claims

Claims 1 to 29 are currently pending in the application.

The status of the claims based on the Final Office Action issued on December 6, 2010 is as follows:

Claims 1 to 29 are rejected for reasons identified below in the "Grounds of Rejection to be Reviewed on Appeal" section.

An Appendix containing a copy of the appealed claims is attached hereto.

Status of Amendments

No amendments have been filed subsequent to the Final Action dated December 6, 2010. Accordingly, it is Applicant's understanding that the claims presently on file correspond to the listing of claims filed in the Voluntary Submission dated December 16, 2005.

Summary of Claimed Subject Matter

Independent claim 1 relates to "a method of routing packets from a wireless communications terminal". Such a method is supported, for example, by the first lines of the abstract as well as page 14, line 26 to page 15, line 4 and page 17, lines 1 to 28.

According to claim 1, the method comprises "in the terminal receiving, via a respective wireless link from at least one of a plurality of wireless access nodes forming a network, network information relating to links between the nodes". The terminal receiving network information relating to links between the nodes is supported, for example, by page 14, line 26 to page 15, line 4, page 16, lines 3 to 18 and block 20 of Fig. 3.

The method of claim 1 further comprises, in the terminal "selecting a route via the network for packets from the terminal in dependence upon the network information and information dependent upon wireless communications between the terminal and at least one of the nodes". This limitation is supported, for example, by the description at page 15, lines 18 to 23, page 17, lines 1 to 28 and block 23 of Fig. 3. Page 17, lines 17 to 24 specifically recite:

> It should be noted that this route computation takes place only in the terminal 12, which accordingly can take into account information relating to the alternative last hops as well as information from its routing information database related to the links between the nodes of the wireless access network to provide an optimum route selection for forwarding packets in accordance with the required QoS, as distinct from route selection being performed in a node as in the prior art.

Claim 1 further recites in the terminal "supplying packets with information relating to the selected route", which is supported, for example, by the description at page 17, line 29 to page 18, line 4.

Independent claim 14 recites "a method of routing packets from a wireless communications terminal via nodes of a network having wireless communications links between the nodes". Such a method is supported, for example, by the first lines of the abstract as well as page 10, lines 4 to 17, page 14, line 26 to page 15, line 4 and page 17, lines 1 to 28.

The method of claim 14 further recites "supplying network information, relating to links between the nodes, from at least one node to the terminal", which is supported, for example, by the description at page 14, line 26 to page 15, line 4, page 16, lines 3 to 18 and block 20 of Fig. 3.

The method of claim 14 further recites "in the terminal, selecting a route via the network for packets from the terminal in dependence upon the network information and information dependent upon wireless communications between the terminal and at least one of the nodes". This limitation is supported, for example, by the description at page 15, lines 18 to 23, page 17, lines 1 to 28 and block 23 of Fig. 3. Page 17, lines 17 to 24 specifically recite:

> It should be noted that this route computation takes place only in the
> terminal 12, which accordingly can take into account information relating to the
> alternative last hops as well as information from its routing information database
> related to the links between the nodes of the wireless access network to provide an
> optimum route selection for forwarding packets in accordance with the required
> QoS, as distinct from route selection being performed in a node as in the prior art.

The method of claim 14 further recites "in the terminal, supplying packets with information relating to the selected route", which is supported, for example, by the description at page 17, line 29 to page 18, line 4.

The method of claim 14 further recites "communicating packets from the terminal via the selected route via the nodes of the network in dependence upon the information in the packets relating to the selected route". This limitation is supported, for example, by the description at page 17, line 29 to page 18, line 4.

Independent claim 24 is substantially similar to independent claim 1 in that it relates to routing packets from a wireless communications terminal based on decisions made in the terminal. The method as recited in claim 24 comprises "in the terminal receiving, via a respective wireless link from at least one of a plurality of wireless access nodes forming a network, network information relating to links between the nodes". The terminal receiving network information relating to links between the nodes is supported, for example, at page 14, line 26 to page 15, line 4, page 16, lines 3 to 18 and block 20 of Fig. 3.

The method of claim 24 further recites, in the terminal "selecting a route via the network for packets from the terminal in dependence upon at least one Quality-of-Service parameter for said packets, the network information, and information dependent upon wireless communications between the terminal and at least one of the nodes". This limitation is supported, for example, by the description at page 15, lines 18 to 23, page 16, lines 3 to 18, page 17, lines 1 to 28 and block 23 of Fig. 3.

Claim 24 further recites, in the terminal "supplying packets with information relating to the selected route", which is supported, for example, by the description at page 17, line 29 to page 18, line 4.

Independent claim 27 is substantially similar to independent claim 1 in that it relates to routing packets from a wireless communications terminal based on decisions made in the terminal. Claim 27 recites in the preamble "A method of routing packets from a wireless communications terminal via nodes of a network having wireless communications links between the nodes". This is supported, for example, by the first lines of the abstract as well as page 10, lines 4 to 17, page 14, line 26 to page 15, line 4 and page 17, lines 1 to 28.

The method as recited in claim 27 comprises "supplying network information, relating to links between the nodes, from at least one node to the terminal", which is supported, for example, by the description at page 14, line 26 to page 15, line 4, page 16, lines 3 to 18 and block 20 of Fig. 3.

The method of claim 27 further recites "in the terminal, selecting a route via the network for packets from the terminal in dependence upon at least one Quality-of-Service parameter for said packets, the network information, and information dependent upon wireless communications between the terminal and at least one of the nodes". This limitation is supported, for example, by the description at page 15, lines 18 to 23, page 16, lines 3 to 18, page 17, lines 1 to 28 and block 23 of Fig. 3.

The method of claim 27 further recites "in the terminal, supplying packets with information relating to the selected route", which is supported, for example, by the description at page 17, line 29 to page 18, line 4.

The method of claim 27 further recites "communicating packets from the terminal via the selected route via the nodes of the network in dependence the information in the packets relating to the selected route". This limitation is supported, for example, by the description at page 17, line 29 to page 18, line 4.

Turning to independent claim 28, the preamble recites "A method of communications in a wireless access node of a network, the network comprising a plurality of nodes and a plurality of links between nodes for communications in the network", which is supported by the first lines of the abstract as well as page 10, lines 4 to 17, page 14, line 26 to page 15, line 4 and page 17, lines 1 to 28.

The method of claim 28 further recites "supplying, via a wireless link to a wireless communication terminal, network information, relating to links between the nodes of the network", which is supported, for example, by page 14, line 26 to page 15, line 4, page 16, lines 3 to 18 and block 20 of Fig. 3.

The method of claim 28 further recites "receiving, from the wireless communications terminal, packets including information relating to a route selected by the wireless communications terminal for routing packets via the network", which is supported, for example, by the description at page 17, line 29 to page 18, line 4.

The method of claim 28 further recites "routing the packets via the selected route", which is supported, for example, by the description at page 17, line 29 to page 18, line 4.

Each of the appealed independent claims has thus been read on the specification and drawings, as recommended in MPEP 1206.

Grounds of Rejection to be Reviewed on Appeal

The issues which are hereby presented for review are as follows:

1.   whether claims 1 to 8, 11 to 18 and 21 to 29 are unpatentable under 35 U.S.C. 103(a) over Alriksson *et al.* (U.S. Patent No. 6,977,938, hereinafter Alriksson) in view of Dolganow *et al.* (U.S. Patent Publication No. 2006/0123110, hereinafter Dolganow) and McAllister *et al.* (U.S. Patent Publication No. 2001/0010681, hereinafter McAllister) and further in view of Iwata (U.S. Patent 6,108,708);

2.   whether claims 9 and 19 are unpatentable under 35 U.S.C. 103(a) over Alriksson in view of Dolganow, McAllister and Iwata and further in view of Miernik *et al.*(U.S. Patent No. 7,155,215, herein after Miernik); and

3.   whether claims 10 and 20 are unpatentable under 35 U.S.C. 103(a) over Alriksson in view of Dolganow, McAllister and Iwata and further in view of Seguin (U.S. Patent No. 7,206,295).

Argument

1.   **Whether claims 1 to 8, 11 to 18 and 21 to 29 are unpatentable under 35 U.S.C. 103(a) over Alriksson in view of Dolganow and McAllister and further in view of Iwata**

In rejecting claims under 35 U.S.C. 103(a), the Examiner bears the initial burden of establishing a prima facie case of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). *See also In re Piasecki*, 745 F.2d 1468, 1472 (Fed. Cir. 1984). It is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. *See In re Fine*, 837 F.2d, 1071, 1073 (Fed. Cir. 1988). In so doing, the Examiner is expected to make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966), *viz.*, (1) the scope and content of the prior art; (2) the differences between the prior art and the claims at issue; and (3) the level of ordinary skill in the art. Additionally, in making a rejection under 35 U.S.C. 103(a) on the basis of obviousness, the Examiner must provide some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. *KSR Int'l. Co. v. Teleflex Inc.*,127 S.Ct. 1727, 1741 (2007). Only if this initial burden is met does the burden of coming forward with evidence or argument shift to the appellant. *See Oetiker*, 977 F.2d at 1445. *See also Piasecki*, 745 F.2d at 1472. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. *See Oetiker*, 977 F.2d at 1445; *Piasecki*, 745 F.2d at 1472. Applicant's analysis below demonstrates that the Examiner has failed to properly conform to the aforementioned guidelines for a finding of obviousness under 35 U.S.C. 103.

The Examiner has alleged that claims 1 to 8, 11 to 18 and 21 to 29 are unpatentable under 35 U.S.C. 103(a) over Alriksson in view of Dolganow and McAllister and further in view of Iwata.

Applicant submits that the above-identified claims are patentable over Alriksson, Dolganow, McAllister and Iwata, as the Examiner has not properly determined the differences between the claimed invention and the prior art. Furthermore, the Examiner has not provided a valid explanation to support an obviousness rejection under 35 U.S.C. 103. Applicant's reasoning is detailed below.

Missing Elements

The following is a discussion of why the cited references do not disclose all the elements of the rejected claims. While it may be considered that "the mere existence of differences between prior art and an invention does not establish the invention's non-obviousness", Office personnel must explain why the difference(s) between the prior art and the claimed invention would have been obvious to one skilled in the art (Examination Guidelines for Determining Obviousness under 35 U.S.C. 103 in view of the Supreme Court Decision in *KSR Int'l. Co. v. Teleflex Inc.*,127 S.Ct. 1727, 1741 (2007). As such, if elements from a claim are not disclosed by the combination of cited references and no valid reasoning is provided why the missing elements would be obvious, this may provide a strong basis for why a claim should not be rejected based on obviousness.

In the Final Office Action the Examiner has stated that claims 1 to 8, 11 to 18 and 21 to 29 are unpatentable under 35 U.S.C. 103(a) over Alriksson in view of Dolganow and McAllister and further in view of Iwata. The Examiner alleges that the combination of Alriksson, Dolganow and McAllister discloses the majority of the limitations of claim 1, but fails to disclose "selecting a route from a terminal". It is alleged that Iwata teaches source routing from a terminal based on the disclosure of FIG. 1, in particular elements 100 and 120, in Iwata and the corresponding description at column 1, lines 47 to 49 and column 3, lines 39 to 41.

Applicant will now briefly bring to the Examiner's attention selected portions of the description of the present application that discuss the differences between nodes in a network performing source routing, in a manner analogous to Dolganow and McAllister, and the novel approach of a terminal performing routing of a packet at the terminal recited in the claims of the present application.

Applicants submit that Dolganow describes a system that is substantially the same as what is described at page 4, starting at line 8, of the present application, namely a network in which a network node performs routing of a packet through the network in which "last hop" wireless link conditions, that is the conditions of a wireless access link between the wireless terminal and the access node, are not considered in the routing selection. In the present claims it

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is a wireless link between the wireless communications terminal and the network that is used for receiving network information. Therefore, from the perspective of the claim as a whole, Applicants submit that it is particularly relevant that Dolganow does not disclose or pertain to a wireless terminal having functionality recited in claim 1. Therefore, Applicants submit that Dolganow does not disclose "in the terminal: receiving, via a respective wireless link from at least one of a plurality of wireless access nodes forming a network, network information relating to links between the nodes", as recited in claim 1. Applicants submit that as Dolganow does not disclose a wireless terminal receiving via a wireless link from at least one of a plurality of wireless access nodes forming the network information relating to other links, Dolganow at best teaches an access node receiving via a link from at least one of a plurality of other access nodes information relating to other links.

Applicants submit that McAllister is another example of a network in which a network node performs selection of a route, not a wireless terminal in communication with a node of the network, performing selection of a route, as recited in claim 1. Applicants submit that McAllister, in view of the disclosure at paragraph [0007] of McAllister (i.e. the use of link costs) is a particularly good example of what is described in the present application on page 8, namely "known route selection processes take place in the nodes of the network, and link state messages are only exchanged between the nodes". Clearly, there is no discussion in McAllister regarding using "information dependent upon wireless communications between the terminal and at least one of the nodes" (emphasis added), which includes last hop wireless link conditions between the wireless terminal and an access node of the network, in selecting a route for the packet.

Claim 1 recites that selecting a route is performed "from the terminal in dependence upon the network information and information dependent upon wireless communications between the terminal and at least one of the nodes" (emphasis added). Applicants submit that since the network information is recited as being received by the terminal and the information dependent upon wireless communications is not recited as being received at the terminal, the information dependent upon wireless communications is inherent to the terminal resulting from wireless communications with a one hop away network node. Furthermore, since the "information" is recited as information that is dependent upon wireless communications between the terminal and

at least one of the nodes, Applicants submit that this is information based on a link between the terminal and at least one node. Since it is a wireless link, the link is range limited and does not necessarily include every link to every node in the network. The wireless communications between the terminal and at least one of the nodes are typically over a link between the terminal and a node a first hop away from the terminal, also considered to be "the last hop wireless link between the terminal and the network", page 9, lines 8-9 of the present application. Therefore, Applicants submit that the combination of Dolganow and McAllister fails to disclose selecting a route "from the terminal in dependence upon the <u>network information</u> and <u>information dependent upon wireless communications between the terminal and a least one of the nodes</u>".

On page 2 of the Notice of Panel Decision from Pre-Appeal Brief Review, the Decision states "in contrast to the applicant's contention, pg. 9 lines 6-9 of the specification states that the considerations of the last hop link can be considered in the route selection process. Therefore, the applications specification contradicts the applicant's contention of 'the information dependent upon the wireless communications is **inherent** to the terminal resulting from wireless communications with a one hop away network node'". The word "inherent" is defined on Merriam-Webster's Online dictionary as "involved in the constitution or essential character of something". Applicants submit that the use of inherent was not intended to mean that the information is necessarily hardcoded or permanently part of the wireless terminal, but is inherent in the wireless terminal in that the information is known to the terminal as a result of the terminal being in direct communication with the at least one of the nodes, and not simply information provided about the link as part of the network information. The wireless terminal gleans the information from the actual operation of the link, which is distinct from the information being provided as network information pertaining to a link between two nodes from a mode in the network, as the two types of information as recited as two specific information types in the claim.

For at least the reasons discussed above, Applicants respectfully submit that the combination of Alriksson, Dolganow, McAllister and Iwata does not teach all of the limitations recited in claim 1, as alleged by the Examiner. Furthermore, the Examiner has failed to explain why the missing features would be obvious to one skilled in the art. Without all the limitations of claim 1 being disclosed by the four references and no reason provided by the Examiner why

these missing limitations would be obvious, it is not reasonable to expect that the combination of references would render claim 1 obvious.

Lack of Reasons to Combine References

Once the scope of the prior art is ascertained, the content of the prior art must be properly combined. An obviousness inquiry requires review of a number of factors, including the background knowledge possessed by a person having ordinary skill in the art, to determine whether there was an apparent reason to combine the elements of the prior art in accordance with the present claims. For the Patent Office to combine references in support of an obviousness rejection, the Patent Office must identify a reason why a person of ordinary skill in the art would have combined the references *KSR Int'l. Co. v. Teleflex Inc.,*127 S.Ct. 1727, 1741 (2007). Even if the Patent Office is able to articulate and support a suggestion to combine the references, it is impermissible to pick and choose elements from the prior art while using the application as a template.

Applicants submit that the Examiner's selection of Alriksson is based on hindsight selection solely for its disclosure of a wireless terminal. The Examiner concedes that Alriksson does not disclose any of the steps of the method performed by the wireless device in claim 1 of the present application. As Alriksson does not disclose the active method step limitations of claim 1, which are alleged to be disclosed by the other three references, it is improbable that one skilled in the art would consider such a reference in combination with Dolganow and McAllister, which do not disclose wireless terminal functionality.

On page 14 of the Final Office Action the Examiner indicates with regard to Applicants' argument that the selection of Alriksson is based on hindsight that Alriksson discloses source routing in a wireless environment. Applicants maintain that while Alriksson may be considered to disclose source routing in a terminal, none of the limitations recited in the body of claim 1, and therefore relevant to the claimed invention, are disclosed in Alriksson and it is solely for the preamble of the claims that the Examiner is citing Alriksson, while at least two of the other references perform source routing of a type that teaches away from Alriksson, or at least a source

routing of a type that would cause some of the references to perform in a manner that is other than the manner in which they would otherwise operate.

On page 2 of the Notice of Panel Decision from Pre-Appeal Brief Review, the Decision states that the Panel continues to disagree with the Applicant's assertion that the selection of Alriksson was based on hindsight. The Examiner states that, "As shown in the Office Action, the reference shows source routing in a wireless environment was well known at the time of the instant application". Regardless of whether the reference shows that source routing in a wireless environment was well known at the time of the instant application, it does not teach any of the limitations of the body of the claim. If it does not teach even a single limitation of the body of the claim, Applicants submit that the reference can only be used in a manner that it is being considered in hindsight with an understanding of the claimed invention, especially since the reference is being combined with other references that do not operate in the manner of the claimed invention and are of a type that are particularly described as different than the claimed invention.

In addition, Applicants submit that there is no suggestion of a desirability of the claimed invention in the references that would serve as a reason for one skilled in the art to combine the references. On page 14 of the Final Office Action the Examiner indicates that there is a suggestion of a desirability of the claimed invention as all the references teach source routing and Iwata teaches route selection performed in the terminal. Applicants maintain that the Examiner has failed to provide a suitable explanation of why one would combine the four cited references when at least two of the references being relied upon for the majority of the steps of the method claim are unrelated to wireless communications, which is particularly relevant to the claims as well as for the various reasons discussed in further detail below.

The Examiner alleges that it would have been obvious to modify the system of Alriksson by "receiving, via a respective wireless link from at least one of a plurality of wireless access nodes forming a network, network information relating to links between nodes and selecting a route via the network for packets from the terminal in dependence upon the network information and supplying packets with information relating to the selected route" as allegedly disclosed by Dolganow. The Examiner alleges that such a modification "would benefit the system by

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ensuring the source nodes choose a route based on the current available bandwidth between the links". Applicants submit that Dolganow discloses networks in which the switching nodes, not wireless terminals, receive information and select an appropriate route.

The Examiner alleges that it would have been obvious to modify the system of the combination of Alriksson and Dolganow by selecting a route in dependence upon information dependent upon communications between the source node and at least one of the nodes as allegedly disclosed in McAllister. The Examiner alleges that such a modification "would benefit the system by ensuring that the chosen route is affordable to the end user". Applicants submit that Dolganow and McAllister both disclose networks in which the switching nodes, not wireless terminals, select an appropriate route. Furthermore, McAllister itself recites a system in which "hop-by-hop" routing is used (column 2, paragraph [0016]), in which each node has a primary and an alternate route to use in the event that there is a failure or congestion on the primary route. If a particular node's primary and alternate routes have problems such that a message cannot be routed on either route, the node sends a message to a previous node to allow that node to try its alternate route. Applicants submit that this method uses a local routing table in each node, for example local routing table 11 in Figs. 1 and 2 of McAllister, and thus McAllister does not disclose true "source routing" of a network node, let alone a wireless terminal that makes an entire route selection to be followed. It is only a portion of the background that makes reference to source routing from a network node.

As each of Dolganow and McAllister do not operate in the same manner as Alriksson, Applicants submit that the proposed modification of the references resulting from the combining of the references suggested by the Examiner would change the principle of operation of at least one of Dolganow and McAllister or Alriksson, as Dolganow and McAllister operates in a different manner than Alriksson. Applicants submit that this is another reason that one skilled in the art would not combine Dolganow, McAllister and Alriksson in the manner alleged by the Examiner.

On pages 12 and 13 of the Final Office Action in the Response to Arguments section the Examiner indicates with respect to both Dolganow and McAllister the particular examples illustrate only specific examples in which a source node is connected only to one device, either

the Originating Switch in Dolganow or the Node A in McAllister. The Examiner suggests that it would have been obvious if the source node were connected to more than one Originating Switch or Node A for routing information to be sent to the source node so that the source node could optically select a route. It is unclear why the Examiner is alleging that such an assumption would be obvious for each of the two separate references, neither of which suggests such a scenario. If it was to be considered obvious, as suggested by the Examiner, Applicants submit that at least one of the two references would have suggested such an example.

Applicants submit that since Dolganow and McAllister do not disclose a wireless terminal receiving network information and selecting a routing path for a packet based on network information and information dependent upon wireless communications between the terminal and at least one of the nodes, but instead disclose a network node that does not consider information dependent upon wireless communications between the terminal and at least one of the nodes, each of Dolganow and McAllister teach away from a wireless terminal receiving network information and selecting a routing path for a packet based on network information and information dependent upon wireless communications between the terminal and at least one of the nodes. Applicants submit that this is a reason that one skilled in the art would not combine Dolganow and McAllister with Alriksson in the manner alleged by the Examiner.

On page 4 of the Notice of Panel Decision from Pre-Appeal Brief Review, the Decision states "Regarding applicant's statement neither Dolganow nor McAllister teach a terminal performing source routing wherein the terminal is connected to a plurality of nodes...Iwata teaches source routing wherein the terminal is connected to a plurality of nodes". Applicants maintain that an attempt to combine references that disclose source routing in a wireless terminal and references that disclose source routing in a network node would result in at least one of those references not operating in a manner as intended, especially in view of the benefits of the wireless terminal having knowledge of the last hop wireless communication link that the network node does not have.

The issue date of the Iwata patent is August 22, 2000. Both Dolganow and McAllister are directed to network nodes, which are not endpoints of the described network, performing the source routing. These two references include network endpoints that are identified as "users" in

McAllister and "Originating Parties" in Dolganow. Neither of these references contemplates the users and Originating Parties as performing source routing. The McAllister application was filed on March 22, 2001 and the Dolganow application is a continuation of an application that was filed on June 11, 2001. Both dates are subsequent to the issue date of Iwata. If it were obvious to one skilled in the art to combine the references, as alleged by the Examiner, then it would seem likely that the McAllister and Dolganow applications would have suggested the possibility of the users and Originating Parties, respectively, performing the source routing, as the applications both having filing dates subsequent to the Iwata issue date. However, neither reference suggests such a possibility. This is another reason why Applicants submits that one skilled in the art would not combine the references in the manner alleged by the Examiner and arrive at the claimed invention.

On page 5 of the Notice of Panel Decision from Pre-Appeal Brief Review, with regard to the above preceding paragraph, the Decision states that the "applicant does not provide supporting documentation to support the assertion". Applicants are unsure which assertion the Panel is alluding to. Applicants simply were suggesting that as Iwata was available to the public in the form of the issued patent prior to the filing date of each of Dolganow and McAllister, it would seem logical that if using a wireless terminal for source routing was obvious, as alleged by the Examiner, then Dolganow or McAllister would have considered performing source routing from the end user, and not simply a node in the network. However, as there does not appear to be an indication in Dolganow or McAllister that they considered using an end user to make the source routing decisions based on Iwata, it may call into questionability as to whether simply stating that because Dolganow and McAllister allegedly disclose source routing and because an earlier available reference allegedly discloses a wireless device performing source routing that it would be reasonable to consider combining the references when the later references did not appear to consider end users being able to perform source routing a viable or useful alternative to the nodes of the network performing source routing. With regard to "supporting documentation", the dates of the references being cited by the Examiner would seem to be of record and are identified above. It is unclear what other supporting documentation would be required in view of Applicants' comment that Dolganow and McAllister do not disclose that an end user performs a source routing decision, other than a paragraph by paragraph description as to what is taught and

what is not taught by the cited references. Applicants submit that the onus is on the Examiner to find examples of where Dolganow and/or McAllister disclose that source routing could be performed by the end user or why it would be obvious to combine them in view of the fact that end user source routing was allegedly known at least at the time of Dolganow and McAllister and they did not consider it significant enough or simple or straight forward enough to disclose alternative embodiments with end user source routing.

Furthermore, as Iwata is directed to source routing occurring in a terminal as opposed to in access nodes of the network, Applicants submit that, for similar reason to Alriksson, one skilled in the art would not consider combining Iwata with Dolganow and McAllister.

On page 6 of the Notice of Panel Decision from Pre-Appeal Brief Review, with regard to the above proceeding paragraph the Decision states "as shown above all the references teach source routing and Iwata shows the terminal performing source routing was well know in the art at the time of the instant application". Applicants reiterate that despite Alriksson, Dolganow and McAllister allegedly disclosing source routing and Iwata disclosing a terminal performing source routing, the Examiner has failed to provide a credible argument for combining the references for at least the reasons discussed in detail above.

Applicants submit that as the Examiner has had to look to four separate references to find limitations that together would allegedly render independent claim 1 obvious, and that even though the Examiner submits that all of the references disclose source routing, there is a distinct benefit that comes from the claimed invention, as described in the present application that further defines how and why claim 1 is different than methods and systems described by at least some of the references cited by the Examiner. This strongly indicates that the proposed combination of the cited references would not be considered by one skilled in the art and thus claim 1 should not be considered obvious in view of such a combination.

On the basis of the above, Applicants respectfully submit that the Examiner has not provided a suitable reason for combining the references.

For at least the reasons discussed above, Applicants submit that the Examiner has failed to provide a suitable reason for combining the cited references. Applicants submit that the

Examiner has failed to meet the initial burden of establishing a *prima facie* case of obviousness in view of limitations of claim 1 not being disclosed by the combination of references and failure to provide a suitable reason for combining the references. It is respectfully requested that the Board of Patent Appeals and Interferences overturn the obviousness rejection to claim 1.

Claims 14 and 24 are additional independent method claims that recite respective methods having steps that are performed in the terminal. Claim 27 and 28 are independent claims directed to methods involving routing packets from a wireless communication terminal. As claims 14, 24, 27 and 28 all pertain to a wireless terminal operating in a similar fashion to claim 1, Applicants submit that claims 14, 24, 27 and 28 patentably distinguish over Alriksson, Dolganow, McAllister and Iwata. It is respectfully requested that the Board of Patent Appeals and Interferences overturn the obviousness rejection of claims 14, 24, 27 and 28.

Claims 2 to 8, 11 to 13, 15 to 18, 21 to 23, 25, 26 and 29 are dependent, either directly or indirectly, on claims 1, 14, 24 and 28. For at least the reason of their dependence on claims 1, 14, 24 and 28, Applicants submit that dependent claims 2 to 8, 11 to 13, 15 to 18, 21 to 23, 25, 26 and 29 patentably distinguish over the combination of Alriksson, Dolganow, McAllister and Iwata. It is respectfully requested that the Board of Patent Appeals and Interferences overturn the obviousness rejection of the identified dependent claims.

In view of the foregoing, Applicants respectfully submit that the Examiner's rejection of claims 1 to 8, 11 to 18 and 21 to 29 under 35 U.S.C. 103(a) based on Alriksson, Dolganow, McAllister and Iwata is improper. Applicants respectfully submit that Applicants have established that the Examiner has failed to properly establish a *prima facie* case of obviousness in support of the rejection of the claims under 35 U.S.C. 103(a). It is respectfully submitted that this is clear on its face and the Board of Patent Appeals and Interferences is requested to overturn the Examiner's rejection.

2.   Whether claims 9 and 19 are unpatentable under 35 U.S.C. 103(a) over Alriksson in view of Dolganow, McAllister and Iwata and further in view of Miernik

Claims 9 and 19 are dependent upon independent claims 1 and 14, respectively, either directly or indirectly.

Applicant submits that Miernik does not remedy the deficiencies of the combination of Alriksson, Dolganow, McAllister and Iwata in the independent claims.

For at least their dependence upon the independent claims, Applicants submit that claims 9 and 19 patentably distinguish over the cited references.

In view of the foregoing, Applicants respectfully submit that the Examiner's rejection of claims 9 and 19 under 35 U.S.C. 103(a) based on Alriksson, Dolganow, McAllister, Iwata and Miernik is improper. Applicants respectfully submit that Applicants have established that the Examiner has failed to properly establish a *prima facie* case of obviousness in support of the rejection of the claims under 35 U.S.C. 103(a). It is respectfully submitted that this is clear on its face and the Board of Patent Appeals and Interferences is requested to overturn the Examiner's rejection.

3.   Whether claims 10 and 20 are unpatentable under 35 U.S.C. 103(a) over Alriksson in view of Dolganow, McAllister and Iwata and further in view of Seguin

Claims 10 and 20 are dependent upon independent claims 1 and 14, respectively, either directly or indirectly.

Applicants submit that Seguin does not remedy the deficiencies of the combination of Alriksson, Dolganow, McAllister and Iwata in the independent claims.

For at least their dependence upon the independent claims, Applicants submit that claims 10 and 20 patentably distinguish over the cited references.

In view of the foregoing, Applicants respectfully submit that the Examiner's rejection of claims 10 and 20 under 35 U.S.C. 103(a) based on Alriksson, Dolganow, McAllister, Iwata and Seguin is improper. Applicants respectfully submit that Applicants have established that the Examiner has failed to properly establish a *prima facie* case of obviousness in support of the rejection of the claims under 35 U.S.C. 103(a). It is respectfully submitted that this is clear on its face and the Board of Patent Appeals and Interferences is requested to overturn the Examiner's rejection.

Conclusions

With respect to each of the issues presented herein for review, Applicants respectfully submit that errors have been made in the rejection of the appealed claims.
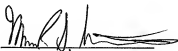
Regarding the issue of whether claims 1 to 8, 11 to 18 and 21 to 29 are unpatentable under 35 U.S.C. 103(a) over Alriksson in view of Dolganow and McAllister and further in view of Iwata, Applicants respectfully request that the rejection of claims 1 to 8, 11 to 18 and 21 to 29 be reconsidered by the Board of Patent Appeals and Interferences and overturned.

Regarding the issue of whether claims 9 and 19 are unpatentable under 35 U.S.C. 103(a) over Alriksson in view of Dolganow, McAllister and Iwata and further in view of Miernik, Applicants respectfully request that the rejection of claims 9 and 19 be reconsidered by the Board of Patent Appeals and Interferences and overturned.

Regarding the issue of whether claims 10 and 20 are unpatentable under 35 U.S.C. 103(a) over Alriksson in view of Dolganow, McAllister and Iwata and further in view of Seguin, Applicants respectfully request that the rejection of claims 10 and 20 be reconsidered by the Board of Patent Appeals and Interferences and overturned.

Respectfully submitted,

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Claims Appendix

1. (Original) A method of routing packets from a wireless communications terminal, comprising the steps of, in the terminal:

     receiving, via a respective wireless link from at least one of a plurality of wireless access nodes forming a network, network information relating to links between the nodes;

     selecting a route via the network for packets from the terminal in dependence upon the network information and information dependent upon wireless communications between the terminal and at least one of the nodes; and

     supplying packets with information relating to the selected route.

2. (Original) A method as claimed in claim 1 and further comprising the step of, in the terminal, monitoring a status of the selected route.

3. (Original) A method as claimed in claim 1 and further comprising the steps of, in the terminal, receiving and monitoring network information to determine a status of the selected route and, selectively in dependence upon the determined status, selecting a new route via the network for packets from the terminal.

4. (Original) A method as claimed in claim 3 wherein the step of selecting a new route comprises selecting a route including wireless communications between the terminal and a different one of the nodes.

5. (Original) A method as claimed in claim 4 wherein the links between the nodes comprise wireless communications links.

6. (Original) A method as claimed in claim 1 wherein the links between the nodes comprise wireless communications links.

7. (Original) A method as claimed in claim 6 wherein said network information comprises Quality-of-Service parameters.

8. (Original) A method as claimed in claim 6 wherein said network information comprises an available bandwidth for each link between nodes in at least a part of the network.

9. (Original) A method as claimed in claim 6 wherein said network information comprises a current delay for each link between nodes in at least a part of the network.

10. (Original) A method as claimed in claim 6 wherein said network information comprises an error rate for each link between nodes in at least a part of the network.

11. (Original) A wireless communications terminal arranged for operation in accordance with the method of claim 1.

12. (Original) A wireless communications terminal arranged for operation in accordance with the method of claim 4.

13. (Original) A wireless access network comprising a plurality of wireless access nodes, a plurality of links between nodes for packet communications in the network, and at least one wireless communications terminal as claimed in claim 12 for wireless communications with the wireless access nodes, the wireless access nodes being arranged for supplying to the terminal said network information relating to links between the nodes.

14. (Original) A method of routing packets from a wireless communications terminal via nodes of a network having wireless communications links between the nodes, comprising the steps of:

supplying network information, relating to links between the nodes, from at least one node to the terminal;

in the terminal, selecting a route via the network for packets from the terminal in dependence upon the network information and information dependent upon wireless communications between the terminal and at least one of the nodes;

in the terminal, supplying packets with information relating to the selected route; and

communicating packets from the terminal via the selected route via the nodes of the network in dependence upon the information in the packets relating to the selected route.

15. (Original) A method as claimed in claim 14 and further comprising the steps of, in the terminal, monitoring network information to determine a status of the selected route and, selectively in dependence upon the determined status, selecting a new route via the network for packets from the terminal.

16. (Original) A method as claimed in claim 15 wherein the step of selecting a new route comprises selecting a route including wireless communications between the terminal and a different one of the nodes.

17. (Original) A method as claimed in claim 14 wherein said network information comprises Quality-of-Service parameters.

18. (Original) A method as claimed in claim 14 wherein said network information comprises an available bandwidth for each link between nodes in at least a part of the network.

19. (Original) A method as claimed in claim 14 wherein said network information comprises a current delay for each link between nodes in at least a part of the network.

20. (Original) A method as claimed in claim 14 wherein said network information comprises an error rate for each link between nodes in at least a part of the network.

21. (Original) A method as claimed in claim 1 wherein the step of selecting a route via the network for packets from the terminal is also dependent upon at least one Quality-of-Service parameter for said packets.

22. (Original) A wireless communications terminal arranged for operation in accordance with the method of claim 21.

23. (Original) A method as claimed in claim 14 wherein the step of selecting a route via the network for packets from the terminal is also dependent upon at least one Quality-of-Service parameter for said packets.

24. (Original) A method of routing packets from a wireless communications terminal, comprising the steps of, in the terminal:

receiving, via a respective wireless link from at least one of a plurality of wireless access nodes forming a network, network information relating to links between the nodes;

selecting a route via the network for packets from the terminal in dependence upon at least one Quality-of-Service parameter for said packets, the network information, and information dependent upon wireless communications between the terminal and at least one of the nodes; and

supplying packets with information relating to the selected route.

25. (Original) A wireless communications terminal arranged for operation in accordance with the method of claim 24.

26. (Original) A wireless access network comprising a plurality of wireless access nodes, a plurality of links between nodes for packet communications in the network, and at least one wireless communications terminal as claimed in claim 25 for wireless communications with the wireless access nodes, the wireless access nodes being arranged for supplying to the terminal said network information relating to links between the nodes.

27. (Original) A method of routing packets from a wireless communications terminal via nodes of a network having wireless communications links between the nodes, comprising the steps of:

supplying network information, relating to links between the nodes, from at least one node to the terminal;

in the terminal, selecting a route via the network for packets from the terminal in dependence upon at least one Quality-of-Service parameter for said packets, the network information, and information dependent upon wireless communications between the terminal and at least one of the nodes;

in the terminal, supplying packets with information relating to the selected route; and

communicating packets from the terminal via the selected route via the nodes of the network in dependence the information in the packets relating to the selected route.

28. (Previously presented) A method of communications in a wireless access node of a network, the network comprising a plurality of nodes and a plurality of links between nodes for communications in the network, the method comprising the steps of:

supplying, via a wireless link to a wireless communication terminal, network information, relating to links between the nodes of the network,

receiving, from the wireless communications terminal, packets including information relating to a route selected by the wireless communications terminal for routing packets via the network; and

routing the packets via the selected route.

29. (Previously presented) A wireless access node arranged for operation in accordance with the method.

Evidence Appendix

None

Related Proceedings Appendix

None